

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/007211 A3

(51) International Patent Classification⁷: A61L 31/16,
A61P 41/00

(21) International Application Number:
PCT/US2004/021452

(22) International Filing Date: 2 July 2004 (02.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/485,251 3 July 2003 (03.07.2003) US

(71) Applicant (for all designated States except US):
MEDTRONIC VASCULAR INC. [US/US]; IP Legal
Department, 3576 Unocal Place, Santa Rosa, CA
95403 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): TEDESCHI, Eugene
[US/US]; 3053 Porter Creek Road, Santa Rosa, CA 95404
(US).

(74) Agent: JARO, Michael; IP Legal Department, 3576 Uno-
cal Place, Santa Rosa, CA 95403 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

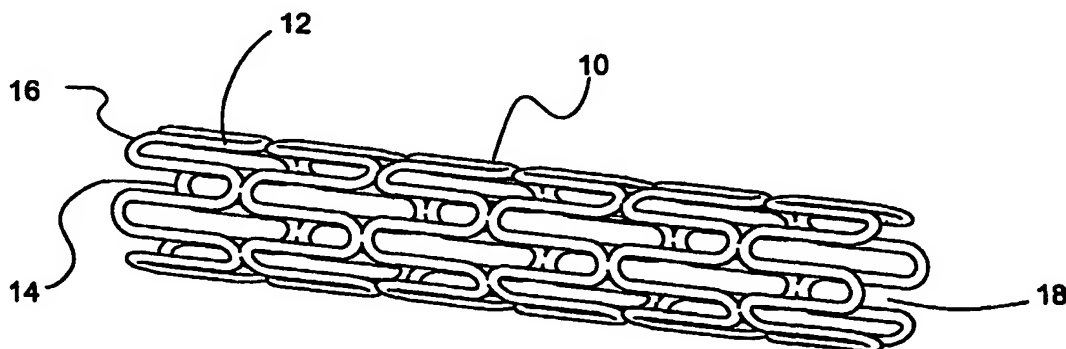
Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
28 July 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: MEDICAL DEVICES WITH PROTEASOME INHIBITORS FOR THE TREATMENT OF RESTENOSIS



(57) Abstract: Methods, compositions and devices for inhibiting restenosis are provided. Specifically, proteasome inhibitor com-
positions and medical devices useful for the site specific delivery of proteasome inhibitors are disclosed. In one embodiment the
medical device is a vascular stent coated with a proteasome inhibitor selected from the group consisting of a boronic acid, a C-terminal
peptide aldehyde and derivatives and analogues thereof. In another embodiment an injection catheter for delivery an anti-restenotic
effective amount of proteasome inhibitor to the adventitia is provided.

BEST AVAILABLE COPY

WO 2005/007211 A3